

Iowa Outdoors

Iowa Department of Natural Resources
www.iowadnr.gov

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DNR UNVEILS NEW HIGH TECH LAKE MAPS

SPIRIT LAKE - For more than 30 years, anglers had fisheries biologist Earl Rose to thank for leading them to the rock reefs, deep water flats and underwater humps found on the hand-drawn contour maps of Iowa lakes. But after 30 years, many of Iowa's lakes have changed and much of the information on those 1970s maps is no longer accurate.

Developing new lake maps became a necessity to meet the requirements of Iowa's lake restoration program. Lakes targeted for restoration or for special projects were top priority when the DNR began the huge task in 2006 of remapping Iowa lakes. The new information collected will be used to establish baseline information in a statewide lakes database that can be used to document changes over time.

Once the initial set of priority lakes are mapped, the focus will shift to mapping other key public lakes, and plans are in the works to map some of Iowa's largest lakes.

Creating a lake map takes a plan. The plan for each lake is created by analyzing new aerial photography and the old survey data in a computer system.

The maps are created using data collected by a single beam sonar and Global Positioning System (GPS) clamped to the side of a boat and driven over the planned grid. The more variable the lake bottom, the greater the number of lines in the grid. Wave action can affect the quality of the soundings and the boat can travel no faster than 7 miles per hour.

The sonar device is an 8-inch diameter brass transducer that is positioned 9 to 10

inches under the water and has a survey-grade GPS antenna is placed above it. The sounder works kind of like a fish finder. It shoots a sound pulse at the bottom of the lake, which bounces off the lake bottom and back to the boat where that data is collected in an onboard laptop computer.

Mapping a small lake does not take much time. From set up to break down, a 250-acre lake can be mapped in two to three hours. Recording the data is only the first step, however. The data recorded from a 250-acre lake can have 10s of thousands of individual soundings. Each sounding must be checked to make sure it is correct and false soundings are eliminated. A 600-acre lake can have between 200,000 and 300,000 soundings.

The next step is to create a bottom surface, then add contour lines. Finally, a map must be created.

“That raw data needs to be turned in to something, that means something to someone,” said Mike Hawkins, fisheries biologist with the DNR at Spirit Lake. Colors are added to define different water depths, public amenities, like boat ramps, parking areas, are added to finish the map. “This next step takes a lot of work and some artistic touch to make the maps look nice,” he said. Finally, the map is sent out for review before it is put on the web.

So far, there are 10 new maps available in black and white and in color on the DNR’s website <http://www.iowadnr.com/fish/index.html> then click on Where to Fish, with more new maps are on the way. The maps are currently not available in downloadable formats for GPS systems.

These new maps have the ability to be updated and published should changes occur. The local fisheries biologists are using a new statewide database to update information in their districts. They can add locations of new fish structure or a new boat ramp into the database. This new information can easily be updated on the map and republished to the internet.

So far, the DNR has collected soundings on 44 lakes. New maps are currently online for Big Creek Lake, Beeds Lake, Black Hawk Lake, Lake Cornelia, Easter Lake, Five Island Lake, George Wyth Lake, Grays Lake, Lake Hawthorn and Hickory Grove Lake.

The next maps to be added to the website will be Lost Island Lake, Meadow Lake, Prairie Rose Lake, Lake Manawa, Little Wall Lake, Lake Wapello, Lower Pine Lake and Lake Geode.

Hawkins said they will be collecting data on about 30 lakes this year, including Red Haw Lake, Lake Ahquabi, Lake Belva Deer, Brushy Creek Lake, and Storm Lake and have maps available sometime during the winter 2009.

The Iowa Great Lakes have not been re-mapped. Hawkins said they are looking into an upgrade of the sonar equipment that would provide much greater lake bed detail and allow them to work more quickly. But that new multi-beam sonar is also much more expensive.

For more information, contact Hawkins at 712-336-1840.

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WHERE HAVE ALL THE BLUEBILLS GONE? SCIENTISTS LOOK TO OUTER SPACE TO SOLVE IOWA DUCK MYSTERY

By Lowell Washburn

Iowa Department of Natural Resources

KEOKUK---Tens of thousands of migrating lesser scaup ducks have arrived on Mississippi River Pool 19.

Located at Keokuk, Pool 19 is the spring migration's most important stopover. Swarming northward from winter resorts in Texas and Louisiana, scaup [commonly referred to as bluebills] come here to refuel on abundant populations of fingernail clams. Once the birds have fed and rested, they will leave the Mississippi and head northwest across the continent. It is the beginning of a journey that will terminate on the remote, boreal forest breeding grounds of northern Canada.

But although the river's waterfowl concentrations are impressive, all is not well. Scaup populations are on the wane ---- down an alarming 50 percent from the 7 million breeding birds inventoried during the 1970s. Although no one can say why, researchers are currently seeking the answer. During the past three years, Iowa's Pool 19 has become the focal point of intense scientific investigation as biologists attempt to unravel the mysteries surrounding the decline.

During the past week, scientists have used baited, wire live-traps to capture and mark a large sample of the river's scaup population. According to Louisiana State University professor and scaup research coordinator, Alan Afton, more than 4,500 of the ducks have been weighed, measured, and then marked with individually numbered metal leg bands. As bands are reported by hunters it will aid scientists in compiling data needed to make intelligent scaup management decisions.

For an additional group of 26 ducks, the research has been extended to a level that is literally out of this world. It's where the business as usual approach to waterfowl management ends and *Star Trek* begins.

Immediately following capture, this select group --- all females --- was taken to a

nearby field station and surgically implanted with state-of-the-art satellite transmitters. Following a brief two-hour recovery, the ducks were released to rejoin the migration.

The purpose this high-tech endeavor, says Afton, is to allow scientists to collectively chart the birds' migration paths, habitat use, and ultimate survival. A pilot experiment was initiated in Iowa just last spring when satellite transmitters were implanted into 17 female scaup. That preliminary effort has already yielded some fascinating insight into scaup survival and the amazing distances ducks travel once they leave the Keokuk pool.

"The birds were tracked by satellite on a daily basis, and we've already gathered quite a bit of data from that initial group," said Afton. "As birds traveled north, three of the seventeen females died during migration. Most of the surviving birds ended up in the boreal forest region of northwest Canada, and one duck went all the way to Alaska."

"On average, migrating females only made a total of six stops between Keokuk, Iowa and the boreal ponds of northwest Canada. Three more females died shortly after arriving on the nesting grounds. By fall [2007] migration, five of the seventeen hens were still alive. Four of those five made it to all the way to the wintering grounds. Two ended up in Louisiana and two spent the winter in Texas. So, for the past year, there was a total of fifteen mortalities. Only two of those ducks were shot by hunters."

As this spring's group of 26, newly radioed hens departs Iowa for the nesting grounds, space stationed satellites will continue to monitor and report the ducks' whereabouts on a daily basis. In most instances, the information will be "location specific" to where biologists can pinpoint [to within feet] the exact wetlands northbound scaup are using.

"We're doing everything possible to get a handle on the things affecting this population," said Afton. "Although there are theories, no one can say for certain why the scaup decline is occurring."

"What we do know is that migrating scaup are in really good [physical] condition when they arrive at Keokuk each spring. But by the time those same birds arrive in northwestern Minnesota, they are in poor body condition."

"Once we pinpoint the exact wetlands scaup are using, we can go in and sample those locations for food," says Afton. "Once we determine what types of wetlands the birds prefer during migration, we can go in and look at the landscape features affecting those habitats. If we can identify a fairly narrow corridor that scaup are utilizing, then we can focus on improving the condition of those particular wetlands."

Ducks Unlimited has constructed an internet web site where the public can view the project's outer space observations. Beginning in April, the radioed scaups' progress can also be monitored on the Iowa DNR's web site. Providing information during both spring and fall migrations, the long-lived transmitters are expected to provide data

through the 2011 migration.

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PLANT SOME SHADE TREE DISTRIBUTION PROGRAMS PLANNED FOR SPRING

DES MOINES - Residential customers of MidAmerican Energy who live in Iowa can reduce future energy use and at the same time landscape their homes and green up their communities this spring through *Plant some shade*[®], an expanded residential tree-planting program.

Plant some shade is a partnership initiative to aid long-term energy and natural resources conservation. The program is being funded by MidAmerican Energy and administered by the Iowa Department of Natural Resources Bureau of Forestry with seven local partners, including the City of Oskaloosa, Polk County Conservation, Pottawattamie County Conservation Board, Scott County Conservation Board, Warren County Conservation Board, City of Waterloo Leisure Services and the Webster County Conservation Board.

Plant some shade enables MidAmerican Energy's residential customers to purchase up to two, 3 to 8-foot landscaping trees for just \$25 each. Each project has a variety of trees available and typically includes 2-3 shade trees, an ornamental and a conifer.

"Encouraging residents to plant trees in their yard is an effective way to reduce energy costs and promote a healthy and aesthetically pleasing environment," said Rick Leuthauser, manager, energy efficiency, for MidAmerican Energy. "We're pleased to be funding *Plant some shade* and we hope many customers participate."

Spring projects will take place in Council Bluffs, Davenport, Des Moines, Fort Dodge, Indianola, Oskaloosa and Waterloo. Advanced orders for *Plant some shade* are required. Order forms can be obtained by visiting www.midamericanenergy.com/plantsomeshade. Orders will be accepted until all trees have been sold.

"This is a wonderful opportunity for homeowners to get a quality tree at an affordable price," said Matt Brewer, forestry volunteer coordinator for the Iowa Department of Natural Resources Bureau of Forestry. "Spring is an ideal time to plant and establish new trees, too. The season's warm days and cool nights are prime for root growth."

For more information, contact Brewer at 515-242-6892.

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PRAIRIE RESCUE EVENT SET FOR FAYETTE COUNTY

Volunteers of all ages will help rescue a prairie at more than 15 sites throughout Iowa during the months of March, April and May.

The public is invited to help with an April 8 prairie rescue event at Volga River Recreation Area, in Fayette County. For a complete listing of all Iowa prairie rescue sites online, go to www.inhf.org/prairierescue2008.html The events are also listed on the Iowa DNR Keepers of the Land events calendar at www.iowadnr.com/volunteer/index.html.

This is an annual event coordinated by the Iowa DNR with support from the Iowa Natural Heritage Foundation, county conservation boards and private conservation groups.

For more information, contact Whitney Davis, with the Iowa DNR, at 515-281-6271, or Whitney.Davis@dnr.iowa.gov.

Today, only about 1/1,000th of Iowa's prairie remains. These small prairie remnants, even those in public ownership, are still at risk from encroaching species and the lack of historic fire and grazing patterns.

Prairie Rescue volunteers will clear invasive species such as brush and small trees from the sites. Experts will conduct controlled burns on some of the prairies. These efforts will allow adults and kids to experience the prairies Iowa's earlier generations saw, while preserving that experience for future generations.

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Iowa Fishing Report

www.iowadnr.gov

March 25, 2008

Ice conditions are deteriorating rapidly across the state, with many lakes and ponds in central and southern Iowa either ice free or with extremely poor quality ice. Conditions on north Iowa lakes are also deteriorating. Anglers should use extreme caution before heading out on any ice.

For current information, contact the district fisheries office. Phone numbers are listed with each district report.

Southwest

Ice conditions have been reported as unsafe and smaller and medium-sized water bodies across the southwest district are ice free.

Three Mile Lake (Union): Ice conditions are unsafe. There is approximately 40 feet of open water around the edge of the lake.

Contact: Gary Sobotka (641)464-3108 for information on the above area lakes.

For more information on general fishing in southwest Iowa, call the regional office in Lewis at 712-769-2587.

Northwest

Most lakes from Hwy. 20 and south are not safe for ice fishing but are still frozen over.

Spirit Lake (Dickinson): Bluegills are fair on the Grade, Trickles Slough and Anglers Bay. Anglers are catching 9 to 10-inch yellow perch and a few crappies in Trickles Slough.

West Okoboji Lake (Dickinson): Fishing is improving for crappie, yellow perch and bluegills. A word of caution: the ice around the points is beginning to thin, but the main bays still have nearly 30 inches of ice.

Storm Lake (Buena Vista): Anglers continue to catch some walleyes, mainly on a bobber and live minnow.

Clear Lake (Cerro Gordo): Ice conditions are starting to deteriorate, especially at the access points. Anglers are still traveling out on foot to the Island and Billy's reef areas. Walleye and yellow bass are hitting in the early morning and evening time periods. Minnows below a bobber and smaller jigging spoons are the best techniques.

For more information on fishing in northwest Iowa, call the regional office in Spirit Lake at 712-336-1840.

Northeast

Lake Meyer (Winneshiek): Fishing has slowed, but anglers are still picking up fish suspended around brush piles. Some 7 to 9-inch crappies are being caught using a chartreuse teardrop or small jig. Small bluegills and bass are also being caught around the brush piles.

Hendricks Lake (Howard): Anglers are catching a few nice-sized bluegills and crappies. The best fishing seems to be early morning or late evening. Fishing for largemouth bass with some as large as 18 inches is fair on minnows.

Volga Lake (Fayette): Fishing has been slow. Try fishing for crappies just under the ice.

Turkey River (Clayton and Fayette): With improving water levels walleye fishing should improve. Try using jigs tipped with live bait fished in deeper holes.

Upper Iowa River (Winneshiek and Allamakee): With improving water levels walleye fishing should improve. Try using jigs tipped with live bait fished in deeper holes.

Trout streams are running a little high but clear. Brown trout seem to be really aggressive when the melt water starts to enter the stream and the water gets cloudy.

For information on fishing in northeast Iowa, call the regional office in

Manchester at 563-927-3276.

Southeast

Mississippi River Pools 16 to 20: In **Pool 16**, tailwater stage at Lock and Dam 15 is 10.88 feet and is expected to rise slightly. Anglers are still catching some walleyes and saugers below the dam at **Davenport** and up in **Sylvan Slough** on jigs and minnows. In **Pool 17**, tailwater stage at Lock and Dam 16 is 10.54 feet and is forecasted to rise slightly then begin falling by late Tuesday or Wednesday. Walleye and sauger fishing has slowed with the rising water but some fish are still being caught below the dam on jigs and minnows. Channel catfish are being caught on shad guts around the **Big Timber backwater** complex. Big Timber has also been producing some crappies on minnows and wax worms. As of last week, with the higher water, the ramp at Big Timber was underwater so access may be limited.

In **Pool 18**, tailwater stage at Lock and Dam 17 is 13.3 feet and is forecasted to crest at 13.7 feet, and is expected to start falling on Tuesday. The Toolesboro landing is under water and the road has been closed. Anglers will have to access the tailwaters at New Boston on the Illinois side of the river. In **Pool 19**, tailwater stage at Lock and Dam 18 is forecasted to reach 9.4 feet on Monday. No fishing report due to high water. In **Pool 20**, tailwater stage at Lock and Dam 19 is 12.2 feet and is forecasted to start falling by Wednesday. No fishing report.

Lake Darling (Washington): Ice conditions are unsafe and expect the ice to be gone by the end of the week.

Lake Belva Deer (Keokuk): Ice conditions are unsafe and expect the ice to be gone by the end of the week.

Lake Geode (Henry): Anglers have had their boats out for the last week

Lake Rathbun (Appanoose): Channel catfish have been biting on shad guts. Look for areas where there is water flowing into the lake. There is still ice on some areas. The water temperature is 37 degrees.

Lake Sugema (Van Buren): Channel catfish have been biting on shad guts and night crawlers. Bluegills have been hitting on small jigs tipped with a wax worm. The ice is completely off the lake.

Lake Wapello (Davis): Channel catfish have been biting on shad guts. The ice is completely off the lake.

Lake Macbride (Johnson): Not recommended for ice fishing.

Diamond Lake (Poweshiek): Not recommended for ice fishing.

Pleasant Creek (Linn): Not recommended for ice fishing.

Kent Park Lake (Johnson): Not recommended for ice fishing.

Union Grove Lake (Tama): Not recommended for ice fishing.

Des Moines River (Van Buren, near Keosauqua): Channel catfish have been biting on shad guts and night crawlers.

For more information on fishing in southeast Iowa, call the regional office in Brighton at 319-694-2430.

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